

products range



3 | 8 Ton.



Models inside

30VX | 35VX | 40VXL
50VX | 55VX | 65VX | 80VX



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30VX | 35VX

Working in confined spaces

Thanks to the rear frame that turns within the track clearance, it is possible to do the digging and loading in complete safety even close to walls or places with little room available.

The speed of rotation of 10 rpm enables higher performance during work.



COMPACT DIMENSION

Front turning radius: 2200 mm on the 30VX and 2180 mm on the 35VX. Rear turning radius: 775 mm on the 30VX and 845 mm on the 35VX. Width of the 30VX reduced to 1550 mm, an ideal machine for working in confined spaces. Excavating flush with a wall is extremely easy. The 35VX has a variable gauge undercarriage of 1520-1800 mm. On the 30VX the large pins and new bushings permit long greasing intervals together with a longer life.

ENGINE

- 30VX: Stage IIIA Yanmar 3TNV84 24.2 HP engine.
- 35VX: Stage IIIA Yanmar 3TNV88 27.6 HP engine.

The Yanmar engine and the high-efficiency hydraulic circuit ensure minimal noise, low fuel consumption and pollution emissions reduced to the minimum. The engine has a low speed of rotation with no vibration whatsoever. The new TNV series complies with current regulations on pollution emissions.

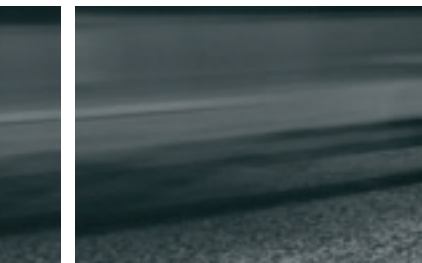
HYDRAULIC SYSTEM

Thanks to careful sizing of the hydraulic system, breakout force on the bucket tooth reaches 26.5 kN (2700 kgf) on both models. 30VX quick coupler for pressure control the machine is equipped with quick couplers for checking the pressures of the hydraulic system.

REMOVABLE COUNTERWEIGHT

The 30VX is supplied std. with a removable counterweight (200 kg) that extends comes out from the maximum width by 80 mm. The counterweight and the length of the tracks give the machine more stability in every working situation.

Working in confined spaces thanks to the rear frame that turns within the track clearance, it is possible to do the excavating and loading in complete safety even close to walls or places with little room available. The speed of rotation of 10 rpm enables higher performance during work.



ANTIDRIFT VALVE

The particularly sophisticated control valve is equipped on the boom circuit with an "Antidrift" valve that prevents the boom lowering into the rest position. The 30VX is moreover equipped with an "Antishock" valve that eliminates boom recoil when making sudden changes in direction when working.



PROTECTION OF COMPONENTS

The hydraulic pipes are routed on the top of the boom and inside the arm with pipes protected with a metal coil and burst-proof sheaths.

BLADE AND ARM CYLINDER PROTECTION

Modular blade pipes with external connection for easier maintenance.



CENTRAL WORK LIGHT

An exclusive "central" halogen work light embedded in the arm is protected by a grille and lights up both to the right and to the left of the arm.

ASYMETRICAL POSITION

The asymmetrical position of the boom increases the operator visual while digging. The swing bracket overhang and cylinder on the right are excellent for offset digging.



AUXILIARY HYDRAULIC CIRCUIT

The auxiliary hydraulic circuit uses a two-way valve for hydraulic attachments such as a hydraulic braker, shears, hydraulic grippers, drills.

RECYCLABLE MATERIALS

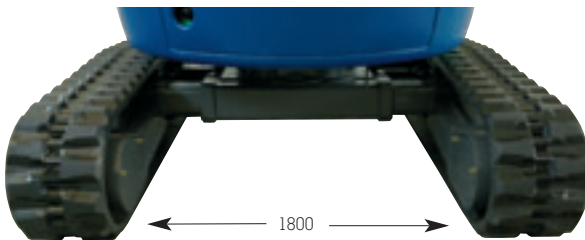
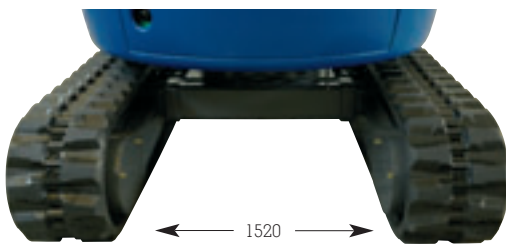
All the materials used for making the 30VX, steel, cast-iron and plastic plates, are 97% recyclable.



COMPACT DIMENSION

Front turning radius:
2200 mm on the 30VX and 2180 mm on the 35VX.
Rear turning radius:
775 mm on the 30VX and 845 mm on the 35VX.

VARIABLE GAUGE UNDERCARRIAGE (35VX)



Specifications

30VX

35VX

Canopy / Cab operating weight w/RS	3115 / 3215 kg (with counterweight)	3405 / 3505 kg
Standard bucket	550 mm	600 mm
Undercarriage width	1550 mm	1520 / 1800 mm
Rear turning radius	775 mm	845 mm
Max. digging depth	2900 mm	4000 mm

COMFORT AND SAFETY

The driving position is very comfortable thanks to the adjustable seat with suspension, spring adjustment according to weight, horizontal adjustment according to driver height, and even the backrest is adjustable. The servo-control Joysticks ensure the utmost precision when manoeuvring. Ergonomic layout of controls, heating, ventilation, cab courtesy light. The pedals controlling the auxiliary circuit and swing are separate and equipped with sturdy guards with the function of a footrest. An additional pedal controls the speed change.



UNDERCARRIAGE, EXCEPTIONAL STABILITY

The design of the track frame helps expel debris and earth, making cleaning easier and reducing the accumulation of dirt. The undercarriage 2100 mm long on the 30VX and 2210 mm long on the 35VX considerably increases front stability and ensures reduced ground pressure, less damage to the ground and track wear. The four supporting rollers on each side together with the track structure ensure excellent side stability. The 30VX is equipped with "tough track" tracks that ensure greater durability. Thanks to the extending frame 1520-1800 mm the 35VX considerably increases stability during the operations of digging and side lifting or on particularly rough ground.

EXCEPTIONAL WEIGHT DISTRIBUTION

The large undercarriage and perfect weight distribution ensure impressive stability, which is greater than conventional machines of the same category. The machine is stable even in particularly critical situations or on muddy ground. The large blade cylinder is well protected against impact and damage.

POWER AND PRODUCTION

The Power Shift control system of the hydraulic circuit, with two variable delivery pumps and a gear pump ensures maximum power, extreme manoeuvrability and precise movements. The servo-assisted piloting circuit is supplied by a separate gear pump.



FULL ACCESSIBILITY

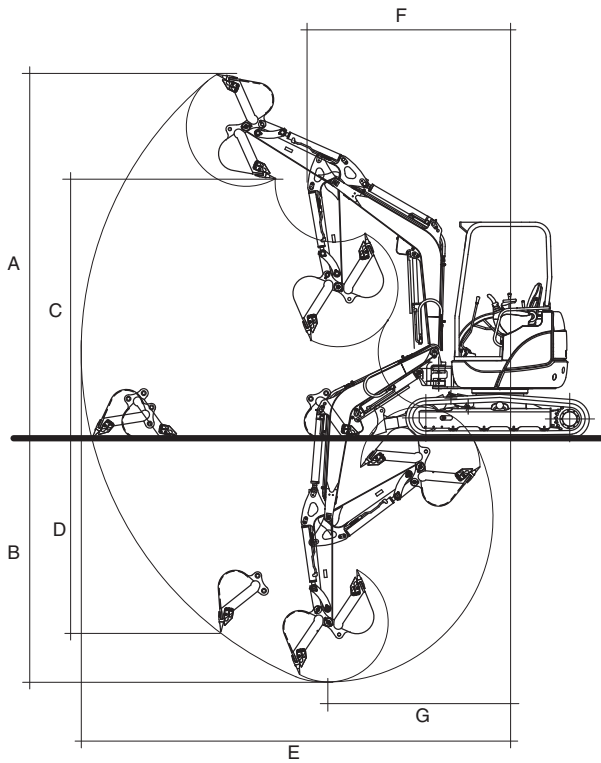
Large bonnets provide access to the engine and to the hydraulic pumps, filters and radiator for inspection and maintenance. All the maintenance points are concentrated under the side bonnet such as the level and filling of the hydraulic oil, radiator fluid, fuel and battery check. Both machines are equipped with a bleed valve and water sedimentation filter. The fuel tank of the 30VX is made of plastic to prevent rust and condensation. The tank with a capacity of 35 litres on the 35VX and as much as 40 litres on the 30VX ensures excellent operating and productive autonomy.

AVAILABLE VERSION: CANOPY AND CAB

Both models are available both with a canopy with 4 stands and with a cab, both TOPS certified against tipping over and ROPS against rolling over. The spacious cab provides high operator comfort: plenty of space inside, large windows, removable windscreen easily located under the roof, sliding side window and an effective heating system. The working position is made even more comfortable thanks to the ergonomic layout of the controls, the adjustable spring seat and excellent soundproofing. The cab door provides easy access to the driving seat also thanks to the handles.

SWING MOTORS

Both models are equipped with a rotation swing motors with multiple disc brake and shock-absorbing valves for progressive starting and stopping without any recoil.



Working range

30VX / 30VX*

35VX / 35VX*

A Maximum dumping height	4170 / 4320 mm	4560 / 4840 mm
B Maximum digging depth	2900 / 3200 mm	3150 / 3450 mm
C Maximum digging height	2880 / 3040 mm	3120 / 3370 mm
D Maximum vertical digging depth	2300 / 2570 mm	2500 / 2950 mm
E Maximum digging radius	4800 / 5080 mm	5090 / 5410 mm
F Minimum front turning radius at right boom swing	2200 / 2200 mm	2180 / 2180 mm
G Maximum digging depth radius	1730 / 1730 mm	1730 / 1730 mm

* with long arm

Optional

■ Excavation and earthmoving equipment

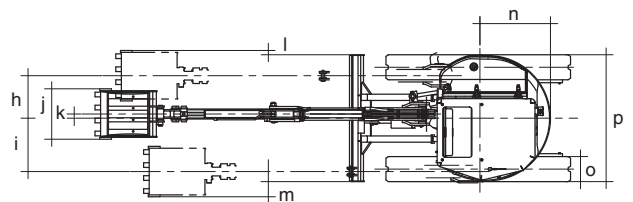
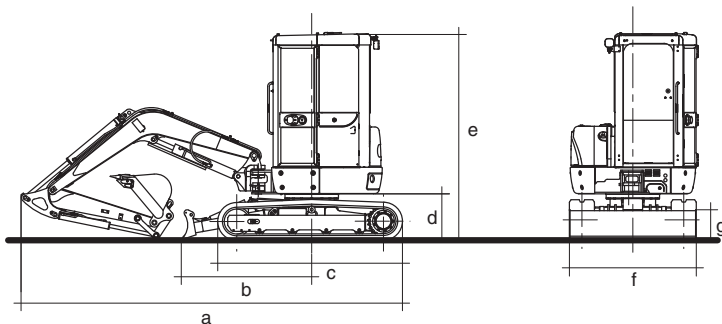
- Long arm (+300 mm)

■ Frame

- Steel tracks width 300 mm

■ Lighting

- 2 additional front lights, 1 additional rear light on top of cabin



Dimensions (mm)

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
30VX	4370	1490	2100	570	2470	1550	380	510	750	550	50	60	200	R 775	300	1550
35VX	4570	1560	2210	560	2470	1520	365	510	640	600	50	50	180	R 845	300	1520-1800



Photographs appearing in the catalogue were taken for publication and may differ in some cases from actual objects. Specifications are subject to change without notice due to technical improvements or modifications.

General Specifications

STD. Bucket capacity (ISO)	0.09 m ³	0.11 m ³
STD. Bucket width	550 mm	600 mm
Machine weight R.S. / S.S.* Canopy	3000 / 3050 kg	3330 / 3440 kg
Machine weight R.S. / S.S.* Cabin	3100 / 3150 kg	3430 / 3540 kg
Operating weight R.S. / S.S.* Canopy	3115 / 3165 kg	3405 / 3515 kg
Operating weight R.S. / S.S.* Cabin	3215 / 3265 kg	3505 / 3615 kg
Counterweight weight	200 kg	-
Transport dimensions	4370 x 1550 x 2480 mm	4570 x 1520 x 2470 mm
Gradeability	30°	30°
Ground pressure (Cabin)	29 kPa	29 kPa
Minimum ground clearance	310 mm	250 mm

*Rubber Shoe / Steel Shoe

Engine

Model	Yanmar 3TNV84	Yanmar 3TNV88
N° cylinders / displacement	3 / 1496 cc direct injection	3 / 1642 cc direct injection
Bore x stroke	84 x 90 mm	88 x 90 mm
Max output	24.3 kW / 3000 min ⁻¹	24.3 kW / 3000 min ⁻¹
Rated output (ISO 1585)	24.2 HP α 2200 rpm (17.8 kW / 2200 min ⁻¹)	27.6 HP α 2300 rpm (20.3 kW / 2300 min ⁻¹)
Fuel consumption	252 g / kW-h	252 g / kW-h
Engine oil pan capacity	6.7 lt (Max level)	6.7 lt (Max level)

Electrical System

Voltage	12 V	12 V
Battery	12 V - 55 Ah	12 V - 55 Ah
Alternator	12 V - 40 A	12 V - 40 A
Starter motor	12 V - 1.7 kW	12 V - 1.7 kW

Hydraulic system

The Power Shift hydraulic circuit control system, with two variable displacement pumps and one gear pump, delivers maximum power, extremely easy handling and precise movements. The remote control circuit is supplied by another, autonomous gear pump.

Maximum flow	34.1 lt / min x 2 + 19.8 lt / min	40.3 lt / min x 2 + 24.6 lt / min
Max Pressure / Setting	21.6 MPa (220 kgf/cm ²) + 20.6 MPa (220 kgf/cm ²)	20.6 MPa (210 kgf/cm ²) + 24.5 MPa (250 kgf/cm ²)
Control	Hydraulic remote control	Hydraulic remote control

Double action hydraulic circuit for accessories

Maximum flow	34.1 lt / min	40.3 lt / min
Set pressure	21.6 MPa (220 kgf / cm ²)	20.6 MPa (210 kgf / cm ²)

End-of-stroke cushioning

Boom cylinder	Rod fully extended	Rod fully extended
Arm cylinder	Rod fully retracted	Rod fully retracted
Swing cylinder	-	Rod fully retracted and fully extended

Slewing system

The swing system is assured with a hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit joint to a gear swing bearing. Full rotation parking brake is equipped with a swing motor.

The brake engages automatically when the safety lever is raised or the engine is turned off.

Swing speed	9.2 min ⁻¹	8.8 min ⁻¹
Turntable braking	Automatic multi-disc brake	Automatic multi-disc brake
Absorption of hydraulic shocks	Shock less valve	Shock less valve

Bucket performance

Max. bucket digging force (ISO 6015)	26.5 kN (2700 kgf)	26.5 kN (2700 kgf)
Max. arm digging force (ISO 6015)	15.8 kN (1610 kgf)	16.0 kN (1630 kgf)

Undercarriage

The lower frame is formed with two strong crawler frame joint to a welded and machined middle frame.

Undercarriage length R.S. / S.S.	2100 / 2085 mm	2110 / 2230 mm
Crawler shoe width	300 mm	300 mm
Lower rollers	4 / 1	4 / 1
Track tension	Tension spring and grease cylinder	Tension spring and grease cylinder
Dozer blade size (Width x Height)	1550 mm x 380 mm	1520 mm x 365 mm
Lift above ground	360 mm	370 mm
Drop below ground	410 mm	390 mm

Travel system

Each track is driven by a two speed hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit.

Travel speed (1α / 2α)	2.5 / 4.8 km/h	2.8 / 4.8 km/h
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Capacity

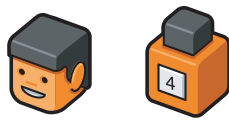
Fuel tank	40 lt	35 lt
Hydraulic tank	33 lt	34 lt
Engine oil	50 lt	56 lt
Engine coolant	4.7 lt	4.7 lt

Boom swing system

Right swing angle	90°	90°
Left swing angle	50°	50°

Other data

Noise level LwA (2000/14/EC)	93 dBA	93 dBA
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40VXL

Operation in confined spaces

As the rear frame rotates within the track gauge, digging and loading can be done in complete safety, even near walls or in very restricted areas. A rotational speed of 8.9 rpm ensures excellent operational performance.



COMPACT DIMENSIONS

Front turning radius with swing: 2590 mm. Rear turning radius: 975 mm. Machine width reduced to 1950 mm. This machine is ideal for use in confined spaces which would be off-limits for other excavators. Digging flush with a wall is greatly facilitated.



YANMAR Stage IIIA 38.6 HP engine

The 4TNV88 Yanmar engine and high-efficiency hydraulic circuit guarantee reduced noise levels, extremely low fuel consumption and minimal polluting emissions. The low-speed engine does not cause any vibration whatsoever. The new TNV range conforms to Stage III A of the current Directive 2004/26/EC regarding polluting emissions.



LESS MAINTENANCE, GREATER DURABILITY

The application of large pivots and new bushings means longer lubrication intervals and increased durability.



HYDRAULIC SYSTEM

Thanks to the careful sizing of the hydraulic system, breakout force on the bucket tooth reaches 30.4 kN.



ANTIDRIFT VALVE

The advanced control valve is equipped with an "Antidrft" valve on the boom circuit to prevent the boom from lowering into the rest position.



COMPONENT PROTECTION

The hydraulic pipes are routed on the top of the boom and inside the arm and are protected with a metal coil and rupture-proof sheaths. Blade and boom cylinder protection.



AUXILIARY HYDRAULIC CIRCUIT

The large-capacity auxiliary hydraulic circuit uses a two-way valve for hydraulic attachments such as wrecker's hammer, shears, hydraulic pincers, drills and bush-cutters.

RECYCLABLE MATERIALS

All the materials used in the machine's construction - sheet steel, cast iron and plastic - are 97% recyclable.

COMPACT DIMENSION

Front turning radius:
2590 mm.
Rear turning radius:
975 mm.

Specifications	40VXL
Canopy / Cab operating weight w/RS	4535 kg
Standard bucket	530 mm
Undercarriage width	1950 mm
Rear turning radius	975 mm
Max. digging depth	3400 mm



COMFORT AND SAFETY

The driver's position is extremely comfortable, thanks to the deluxe adjustable seat with suspension, featuring spring adjustment and horizontal adjustment to suit the driver's weight and height respectively; even the backrest may be adjusted. The servo-assisted joystick controls provide unbeatably precise operation. Ergonomic layout of the cab heating, fan and internal light controls. The pedals controlling the auxiliary circuit and swing are separate and fitted with sturdy guards which function as footrests. An additional pedal controls the speed change.



UNDERCARRIAGE

The asymmetrical groove on the internal and external track plugs helps to reduce vibration whilst travelling. The 2420 mm long undercarriage considerably increases front stability and reduces pressure on the ground, thereby damaging the ground less and minimising track wear. The five supporting rollers on each side, combined with the track structure, guarantee excellent lateral stability.

EXCELLENT WEIGHT DISTRIBUTION

The large undercarriage and perfect weight distribution offer impressive stability, often greater than that offered by conventional machines in its category. The machine remains stable, even in particularly critical situations and muddy ground. The blade cylinders are well protected against impact and damage.

TRAVELLING AND ROTATION GEAR MOTORS

The travelling gear motors have an integrated disc brake which locks the track when it is on the edge of the excavation or on a slope. The rotation gear motor also has a disc brake and shock absorber valves, for smooth, recoil-free starting and stopping.



MACHINE ACCESS: SAFE AND EASY

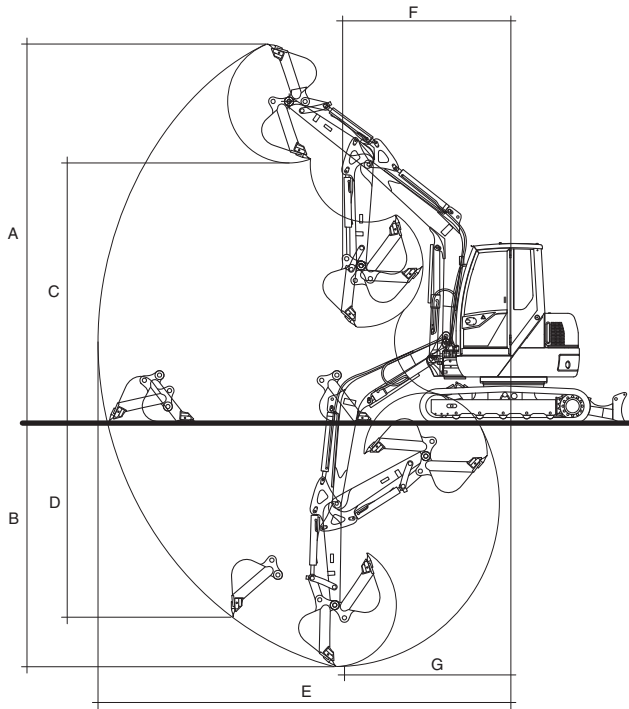
The cab door and handles provide easy access to the driving seat.

POWER AND PRODUCTIVITY: VARIABLE DISPLACEMENT PUMPS

The 40VXL uses a hydraulic circuit fitted with large variable displacement pumps, which make it possible to work using multiple controls, for increased efficiency and operating speed.

OUTSTANDING OPERATOR COMFORT

The spacious cab is extremely comfortable: there is plenty of space inside, as well as metal-finish surfaces, large windows with 360° visibility, removable windscreen with conveniently-located opening just underneath the canopy, a sliding double side window and highly effective heating system. The operator position is made even more comfortable by the ergonomic control layout, adjustable spring seat and excellent soundproofing. The cab may also be fitted with air-conditioning.



Working range

	40VXL	40VXL*
A Maximum dumping height	5050 mm	5130 mm
B Maximum digging depth	3400 mm	3650 mm
C Maximum digging height	3440 mm	3530 mm
D Maximum vertical digging depth	2585 mm	2800 mm
E Maximum digging radius	5820 mm	6040 mm
F Minimum front turning radius at right boom swing	2590 mm 2215 mm	2595 mm 2220 mm
G Maximum digging depth radius	2490 mm	2490 mm

* with long arm

Optional

■ Excavation and earthmoving equipment

- Long arm (+250 mm)

■ Frame

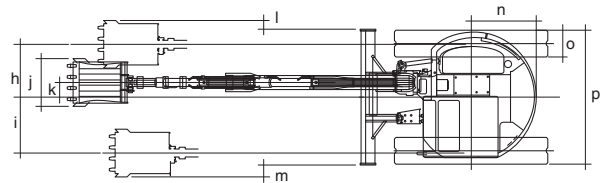
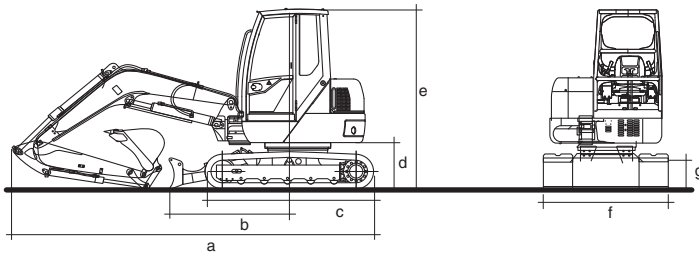
- Steel tracks width 400 mm

■ Lighting

- 2 additional front lights, 1 additional rear light on top of cabin

■ Comfort and Safety

- Cab Air Conditionning
- FOPS falling object protection for cab



Dimensions (mm)

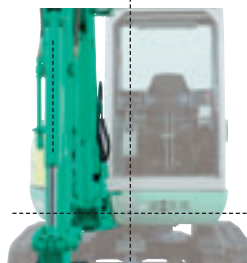
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
40VXL	5220	1700	2420	645	2530	1950	370	900	910	530	315	225	200	975	400	1950



FULL ACCESSIBILITY

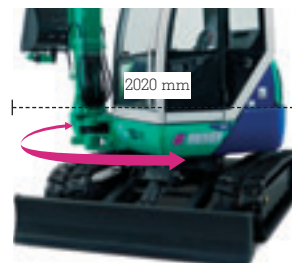
Various cowlings make it possible to access the engine, hydraulic pumps, filters and radiator for inspections and maintenance.

All maintenance points, such as the hydraulic fluid, radiator fluid and fuel level gauges and filler caps, as well as the battery check, are conveniently located underneath the side panels. The fuel tank is equipped with a bleed valve and sludge filter.



ASYMMETRIC ARM AND MINIMUM TOTAL TURNING RADIUS

The notably asymmetrical position of the arm in relation to the fifth wheel provides a full view of the excavation. The swing assembly overhang when the cylinder is positioned on the right-hand side is excellent and aids off-centre excavation, with an overall diameter of 2020 mm.



ARM-MOUNTED WORKLIGHT

A halogen work lamp on the side of the arm illuminates the digging area, thus greatly increasing operator comfort and efficiency.



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misure senza preavviso.

40VXL

General Specifications

STD. Bucket capacity (ISO)	0.12 m ³
STD. Bucket width	530 mm
Machine weight R.S. / S.S.* Cabin	4460 / 4610 kg
Operating weight R.S. / S.S.* Cabin	4535 / 4685 kg
Transport dimensions	5220 x 1950 x 2530 mm
Gradeability	30°
Ground pressure (Cabin)	25 kPa
Minimum ground clearance	320 mm
*Rubber Shoe / Steel Shoe	

Engine

Model	Yanmar 4TNV88
N° cylinders / displacement	4 / 2189 cc direct injection
Bore x stroke	88 x 90 mm
Max output	34.9 kW / 3000 min ⁻¹
Rated output (ISO 1585)	38.6 HP α 2400 rpm (28.3 kW / 2400 min ⁻¹)
Fuel consumption	249 g / kW-h
Engine oil pan capacity	7.4 lt (Max level)

Electrical System

Voltage	12 V
Battery	12 V - 72 Ah
Alternator	12 V - 40 A
Starter motor	12 V - 2.3 kW

Hydraulic system

The Power Shift hydraulic circuit control system, with two variable displacement pumps and one gear pump, delivers maximum power, extremely easy handling and precise movements. The remote control circuit is supplied by another, autonomous gear pump.

Maximum flow	60.0 lt / min x 2 + 43.9 lt / min
Max Pressure / Setting	20.6 MPa (210 kgf / cm ²)
Control	Hydraulic remote control

Double action hydraulic circuit for accessories

Maximum flow	100 lt / min
Set pressure	20.6 MPa (210 kgf / cm ²)

End-of-stroke cushioning

Boom cylinder	Rod fully extended
Arm cylinder	Rod fully retracted
Swing cylinder	Rod fully retracted and fully extended

Slewing system

The swing system is assured with a hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit joint to a gear swing bearing. Full rotation parking brake is equipped with a swing motor.

The brake engages automatically when the safety lever is raised or the engine is turned off.

Swing speed	8.9 min ⁻¹
Turntable braking	Automatic multi-disc brake
Absorption of hydraulic shocks	Shock less valve

Bucket performance

Max. bucket digging force (ISO 6015)	30.4 kN (3100 kgf)
Max. arm digging force (ISO 6015)	18.6 kN (1900 kgf)

Undercarriage

The lower frame is formed with two strong crawler frame joint to a welded and machined middle frame.

Undercarriage length R.S. / S.S.	2420 mm
Crawler shoe width	400 mm
Lower rollers	5 / 1
Track tension	Tension spring and grease cylinder
Dozer blade size (Width x Height)	1950 mm x 370 mm
Lift above ground	410 mm
Drop below ground	360 mm

Travel system

Each track is driven by a two speed hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit and automatically parking brake.

Travel speed (1α / 2α)	3.1 / 5.1 km/h
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Capacity

Fuel tank	65 lt
Hydraulic tank	55 lt
Engine oil	84 lt
Engine coolant	6.7 lt

Boom swing system

Right swing angle	90°
Left swing angle	50°

Other data

Noise level LwA (2000/14/EC)	95 dBA
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50VX | 55VX

The zero tail-swing

50VX and 55VX mini excavators in the 5 ton class that complete the range of compact machines. Load sensing hydraulics, high performance and full reliability, but also an exceptional level of operational safety.

A new, roomier cab designed for the greatest operator comfort and reliability easy maintenance.

Thanks to the rear frame that turns within the track clearance, it is possible to do the digging and loading in complete safety even close to walls or places with little room available.

The speed of rotation of 9 rpm enables higher performance during work.



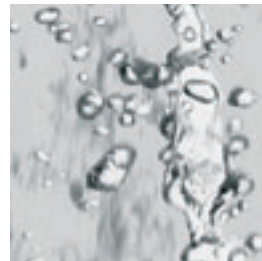
COMPACT DIMENSIONS

Front turning radius:
2240 mm (50VX) 2270 mm (55VX).
Rear turning radius:
995 mm (50VX) 1095 mm (55VX).
Width of both models reduced to 1990 mm. Two ideal machines for working in confined spaces that are prohibitive for other excavators. Excavating flush with a wall is extremely easy. The large pins and new bushings permit long greasing intervals extended to 250 hours together with a longer life.



STAGE IIIA YANMAR ENGINE

Stage IIIA Yanmar 4TNV88 of 2.19 litre diesel engine generates a power output of 37.1 HP at 2300 rpm. The Yanmar engine and the high-efficiency hydraulic circuit ensure minimal noise, low fuel consumption and pollution emissions reduced to the minimum. The bore/stroke ratio close to 1 (88 mm x 90 mm) denotes an engine with little vibration due to the less inertia and linear velocity of the piston. The new TNV series complies with current regulations on pollution emissions.



HYDRAULIC SYSTEM

Thanks to careful sizing of the hydraulic system, breakout force on the bucket tooth reaches a truly impressive 35 kN for the 50VX and 40 kN for the 55VX. The hydraulic control valve is equipped with quick couplers for checking the pressures.



COUNTERWEIGHT

The 55VX is supplied std. with a counterweight (290 kg) that extends from the maximum width by 100 mm. The counterweight and the greater length of the tracks give the machine more stability in every working situation.



CYLINDERS

The heads are welded to the stems by friction and ensure the full cross-section is aligned and welded as if the part were made by casting.

ANTIDRIFT-ANTISHOCK VALVE

The load-sensing control valve is equipped on the boom circuit with an "Antidrft" valve that prevents the boom lowering into the rest position. In the hydraulic control circuit there is an "Antishock" valve that eliminates boom recoil due to sudden changes in direction when working.

PROTECTION OF COMPONENTS

The hydraulic pipes are routed on the top of the boom and inside the arm.

BLADE AND ARM CYLINDER PROTECTION

Burst-proof sheaths, pipes protected with a metal coil and "multilayer cut-proof" bucket control pipes.

CENTRAL WORK LIGHT

An exclusive "central" halogen work light embedded in the arm is protected by a grille and lights up both to the right and to the left of the arm.

AUXILIARY HYDRAULIC CIRCUIT

The auxiliary hydraulic circuit uses a two-way valve for hydraulic attachments such as a hydraulic braker, shears, hydraulic grippers, drills. The additional hydraulic function is standard.

RECYCLABLE MATERIALS

All the materials used for making the machine, steel, cast-iron and plastic plates, are 97% recyclable.



COMPACT DIMENSION

Front turning radius:
2240 mm on the 50VX and 2270 mm on the 55VX.
Rear turning radius:
995 mm on the 50VX and 1095 mm on the 55VX.

Specifications	50VX	55VX
Operational weight w / RS	4950 kg	5450 kg (with counterweight)
Standard bucket	650 mm	700 mm
Undercarriage width	1990 mm	1990 mm
Rear turning radius	995 mm	1095 mm
Max. digging depth	3600 mm	3800 mm



COMFORT AND SAFETY

The driving position is very comfortable thanks to the deluxe adjustable seat with suspension, spring adjustment according to weight, horizontal adjustment according to driver height, and even the backrest is adjustable. The servo-control Joysticks ensure the utmost precision during all operations. Ergonomic layout of controls, heating, ventilation, cab courtesy light. The pedals controlling the auxiliary circuit and swing are separate and equipped with sturdy guards with the function of a footrest. The travelling levers are equipped with pedals. The cab door provides easy access to the driving seat also thanks to the convenient handles.



TRAVELLING AND SWING MOTORS

The travelling swing motors integrate a disc brake that blocks the track on the edge of the excavation or on a slope. The swing motor also has a disc brake and shock-absorbing valves for progressive starting and stopping without any recoil.



NEW UNDERCARRIAGE DESIGN

The design of the track frame helps expel debris and earth, making cleaning easier and reducing the accumulation of dirt. The new tread pattern and improved rubber compound of the "tough track" reduces vibration, improves ride comfort and ensures greater durability. The oversized undercarriage on both models 2490 mm long considerably increases front stability and ensures reduced ground pressure, less damage to the ground and minimal track wear. The five supporting rollers on each side together with the track structure ensure excellent side stability.

EXCEPTIONAL WEIGHT DISTRIBUTION

The large undercarriage and perfect weight distribution ensure impressive stability, which is often greater than conventional machines of the same category. The machine is stable even in particularly critical situations or on muddy ground. The "overturned" blade cylinder with chrome-plated stem is large in size, well off the ground and safely protected against impact and damage. The box arms of the blade provide maximum rigidity. The modular piping is designed with an external connection to simplify replacement should it ever be needed

ELECTRICAL SYSTEM

The electrical system is powered by a 65 Ah battery that is easily accessible for emergency connections. The reliability of the electrical lay-out is due to watertight connections, corrugated protection with solid supports, while circuit identification is facilitated by coloured and numbered wires. Near to the arm pin system there is a practical external power socket.



THE HYDRAULIC LOAD SENSING CONTROL SYSTEM

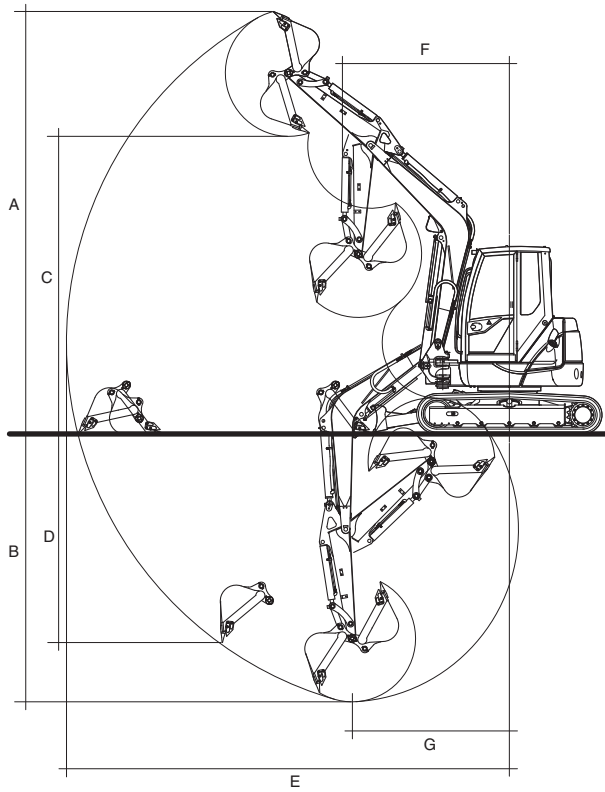
On both models all the hydraulic functions are supplied by a one single pump with axial pistons and variable displacement with Load Sensing control. A gear pump mounted in series supplies the pilot circuit. The pump delivers only the necessary delivery and cuts it down to the minimum when the joysticks are in neutral and cuts off the flow on reaching the maximum pressure. The system makes for extremely precise manoeuvring, highly sensitive operator control with precise and smooth movements permitting simultaneous movements even when travelling. Thanks to the distribution of the oil flow rates, there is a considerable increase in operating capacity when digging.

FULL ACCESSIBILITY

Broad access to the engine and the hydraulic pumps due to there being no side pillars and good bonnet raising help access to filters and to the radiator for inspection and maintenance. All the maintenance points are concentrated under the side bonnet such as the hydraulic fluid level optical gauge, it is easy to see the oil, water and fuel filling, battery check and hydraulic control valve check. The hydraulic filter is outside the tank and is extremely practical as it avoids contamination when being changed. The 50VX and 55VX are equipped with a bleed valve and water sedimentation filter.

TANK CAPACITY

The tank with a capacity of as much as 65 litres ensures excellent operating autonomy.



Working range

	50VX / 50VX*	55VX / 55VX*
A Maximum dumping height	5680 / 5940 mm	5900 / 6140 mm
B Maximum digging depth	3600 / 3900 mm	3800 / 4100 mm
C Maximum digging height	4000 / 4250 mm	4220 / 4460 mm
D Maximum vertical digging depth	2800 / 3220 mm	2970 / 3370 mm
E Maximum digging radius	5950 / 6260 mm	6170 / 6470 mm
F Minimum front turning radius at right boom swing	2240 / 2350 mm	2270 / 2370 mm
G Maximum digging depth radius	2110 / 2170 mm	2230 / 2260 mm

* with long arm

Optional

■ Excavation and earthmoving equipment

- Long arm (+300 mm)

■ Frame

- Steel tracks width 400 mm

■ Lighting

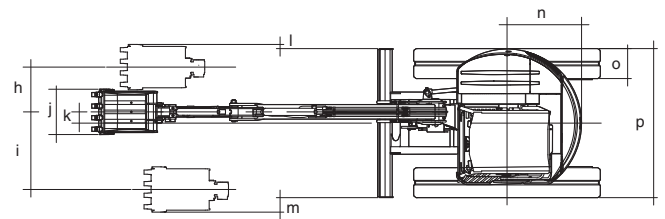
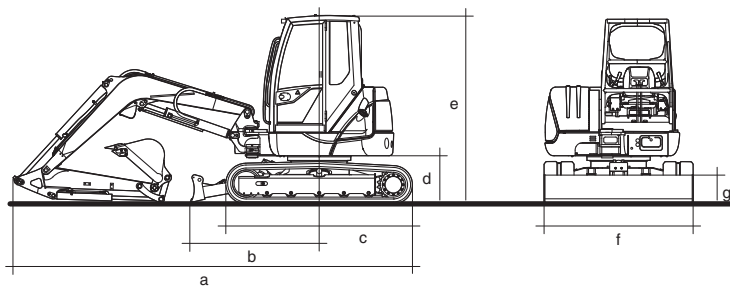
- 2 additional front lights, 1 additional rear light on top of cabin

■ Comfort and Safety

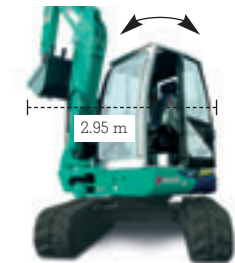
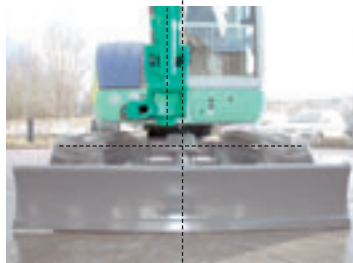
- Cab Air Conditionning
- FOPS falling object protection for cab

■ Miscellaneous

- Special Paint
- Radiator front grill
- Vertical Exhaust thill pipe



Dimensions (mm)	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
50VX	5330	1840	2490	640	2540	1990	385	750	885	600	150	55	190	R 995	400	1990
55VX	5480	1730	2490	625	2540	1990	385	750	885	650	150	80	215	R 1095	400	1990



HIGH OPERATOR COMFORT

The spacious cab, TOPS-ROPS-FOPS certified, provides high operator comfort: plenty of space inside, lined metal surfaces, large windows with 360° vision, removable windscreen with opening easily located under the roof, double side window that slides open and an effective heating system. The working position is made even more comfortable thanks to the ergonomic layout of the controls, the adjustable spring seat and excellent soundproofing. The cab can be equipped with an air-conditioning system.

ASYMMETRIC ARM

AND MINIMUM TOTAL TURNING RADIUS

The asymmetrical position of the boom increases the operator vision while digging. The swing bracket overhang and cylinder on the right are excellent for offset digging. The overhang of the tilting assembly is excellent and aids off-centre excavation, with total circular overall dimensions of 295 mm.

THE BUCKET PROFILE

The standard bucket has an "open" profile that ensures a truly excellent depth of excavation: 3600 mm (3900 mm with the long arm) on the 50VX and 3800 mm (4100 mm with the long arm) on the 55VX. The bucket teeth are welded with replaceable tips.



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General Specifications

	50VX	55VX
STD. Bucket capacity (ISO)	0.16 m ³	0.18 m ³
STD. Bucket width	650 mm	700 mm
Machine weight R.S. / S.S.* Cabin	4810 / 4850 kg	5310 / 5340 kg (with counterweight)
Operating weight R.S. / S.S.* Cabin	4950 / 4990 kg	5450 / 5480 kg (with counterweight)
Counterweight weight	-	290 kg
Transport dimensions	5330 x 1990 x 2540 mm	5480 x 1990 x 2540 mm
Gradeability	30°	30°
Ground pressure (Cabin)	28 kPa	29 kPa
Minimum ground clearance	320 / 325 mm	320 / 325 mm

*Rubber Shoe / Steel Shoe

Engine

Model	Yanmar 4TNV88	Yanmar 4TNV88
N° cylinders / displacement	4 / 2189 cc direct injection	4 / 2189 cc direct injection
Bore x stroke	88 x 90 mm	88 x 90 mm
Max output	34.9 kW / 3000 min ⁻¹	34.9 kW / 3000 min ⁻¹
Rated output (ISO 1585)	37.1 HP α 2300 rpm (27.3 kW / 2300 min ⁻¹)	37.1 HP α 2300 rpm (27.3 kW / 2300 min ⁻¹)
Fuel consumption	253 g / kW-h	253 g / kW-h
Engine oil pan capacity	7.4 lt (Max level)	7.4 lt (Max level)

Electrical System

Voltage	12 V	12 V
Battery	12 V - 64 Ah	12 V - 64 Ah
Alternator	12 V - 40 A	12 V - 40 A
Starter motor	12 V - 2.3 kW	12 V - 2.3 kW

Hydraulic system

The LOAD SENSING hydraulic circuit control system, with a variable displacement pump, allow to share out the flow for precise movements and extremely easy operations. The remote control circuit is supplied by another, autonomous gear pump.

Maximum flow	124 lt / min	124 lt / min
Max Pressure / Setting	24.5 MPa (250 kgf / cm ²)	24.5 MPa (250 kgf / cm ²)
Control	Hydraulic remote control	Hydraulic remote control

Double action hydraulic circuit for accessories

Maximum flow	65 lt / min	65 lt / min
Set pressure	24.5 MPa (250 kgf / cm ²)	24.5 MPa (250 kgf / cm ²)

End-of-stroke cushioning

Boom cylinder	Rod fully extended	Rod fully extended
Arm cylinder	Rod fully retracted	Rod fully retracted

Slewing system

The swing system is assured with a hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit joint to a gear swing bearing. Full rotation parking brake is equipped with a swing motor.

The brake engages automatically when the safety lever is raised or the engine is turned off.

Swing speed	9 min ⁻¹	9 min ⁻¹
Turntable braking	Automatic multi-disc brake	Automatic multi-disc brake
Absorption of hydraulic shocks	Shock less valve	Shock less valve

Bucket performance

Max. bucket digging force (ISO 6015)	35 kN (3570 kgf)	40 kN (4060 kgf)
Max. arm digging force (ISO 6015)	22.1 kN (2260 kgf)	24 kN (2450 kgf)

Undercarriage

The lower frame is formed with two strong crawler frame joint to a welded and machined middle frame.

Undercarriage length R.S. / S.S.	2490 mm	2490 mm
Crawler shoe width	400 mm	400 mm
Lower rollers	5 / 1	5 / 1
Track tension	Tension spring and grease cylinder	Tension spring and grease cylinder
Dozer blade size (Width x Height)	1990 mm x 385 mm	1990 mm x 385 mm
Lift above ground	420 mm	405 mm
Drop below ground	430 mm	375 mm

Travel system

Each track is driven by a two speed hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit and automatically parking brake.

Travel speed (1α / 2α)	2.6 / 4.8 km/h	2.6 / 4.8 km/h
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Capacity

Fuel tank	65 lt	65 lt
Hydraulic tank	55 lt	55 lt
Engine oil	81 lt	81 lt
Engine coolant	5.3 lt	5.3 lt

Boom swing system

Right swing angle	87°	87°
Left swing angle	50°	50°

Other data

Noise level LwA (2000/14/EC)	96 dBA	96 dBA
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65VX | 80VX

On the cutting-edge of technology

65VX and 80VX midi-excavators are the latest development in zero tail-swing technology and design, a level of perfection that no one else has yet reached. Load sensing hydraulics for the 65VX, high performance and full reliability, but also an exceptional level of operational safety. A new, roomier cab designed for the greatest operator comfort and easy maintenance.

Thanks to the rear frame that turns within the track clearance, it is possible to do the excavating and loading in complete safety even close to walls or places with little room available.

The speed of rotation of 10 rpm on the 65VX and 9.2 rpm on the 80VX enables higher performance during work.



COMPACT DIMENSIONS

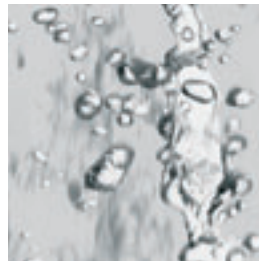
Front turning radius: 2560 mm.
Rear turning radius: 1050 mm on the 65VX and 1100 mm on the 80VX. Machine width reduced to 2100 mm on the 65VX and 2200 mm on the 80VX. Two ideal machines for working in confined spaces that are prohibitive for other excavators. Excavating flush with a wall is extremely easy. The large pins and new bushings permit long greasing intervals together with a longer life.



ENGINE

- 65VX: Stage IIIA Yanmar 4TNV98 55.7 HP engine.
- 80VX: Stage IIIA Yanmar 4TNV98 58.7 HP engine.

Our engines and the high-efficiency hydraulic circuit ensure minimal noise, low fuel consumption and pollution emissions reduced to the minimum. The engine has a low speed of rotation with no vibration whatsoever. The new TNV series complies with current regulations on pollution emissions.



HYDRAULIC SYSTEM

Thanks to careful sizing of the hydraulic system, breakout force on the bucket tooth reaches 43 kN on the 65VX and 55kN on the 80VX. 65VX is equipped with quick couplers for checking the pressures of the hydraulic system.



REMOVABLE COUNTERWEIGHT

Both models are equipped as standard with a removable counterweight (420 kg on the 65VX and 400 kg on the 80VX) that extends from the maximum width by 120 mm. The counterweight and the considerable length of the tracks give both models excellent stability in every working situation.



ANTIDRIFT-ANTISHOCK VALVE

The load-sensing control valve, in the case of the 65VX, is equipped on the boom circuit with an "Antidrft" valve that prevents the boom lowering into the rest position (on both models). In the hydraulic control circuit of the 65VX there is an "Antishock" valve that eliminates boom recoil due to sudden changes in direction when working.

PROTECTION OF COMPONENTS

The hydraulic pipes are routed on the top of the boom and inside the arm with pipes protected with a metal coil and burst-proof sheaths.

BLADE AND ARM CYLINDER PROTECTION

Modular blade pipes with external connections for easier maintenance.

AUXILIARY HYDRAULIC CIRCUIT

The auxiliary hydraulic circuit uses a two-way valve for hydraulic attachments such as a hydraulic breaker, shears, hydraulic grippers, drills.

RECYCLABLE MATERIALS

All the materials used for making the machine, steel, cast-iron and plastic plates, are 97% recyclable.

CENTRAL WORK LIGHT

An exclusive "central" halogen work light embedded in the arm is protected by a grille and lights up both to the right and to the left of the arm.



COMPACT DIMENSION

Front turning radius:
2560 mm on the 65VX and the 80VX.
Rear turning radius:
1050 mm on the 65VX and 1100 mm on the 80VX.

Specifications	65VX	80VX
Operational weight w / RS	6305 kg (with counterweight)	8125 kg
Standard bucket	630 mm	730 mm
Undercarriage width	2100 mm	2200 mm
Rear turning radius	1050 mm	1100 mm
Max. digging depth	3915 mm	4200 mm



COMFORT AND SAFETY

The driving position is very comfortable thanks to the deluxe adjustable seat with suspension, spring adjustment according to weight, horizontal adjustment according to driver height, and even the backrest is adjustable. The servo-control Joysticks ensure the utmost precision during all operations. Ergonomic layout of controls, heating, ventilation, cab courtesy light. The pedals controlling the auxiliary circuit and swing are separate and equipped with sturdy guards with the function of a footrest. The travelling levers on the 65VX are equipped with pedals. On the 80VX an additional pedal controls the speed change.



NEW UNDERCARRIAGE DESIGN

The design of the track frame helps expel debris and earth, making cleaning easier and reducing the accumulation of dirt. The 65VX is equipped with “tough track” tracks that ensure greater durability. The undercarriage 2795 mm long on the 65VX and 2730 mm long on the 80VX considerably increases front stability and ensures reduced ground pressure, less damage to the ground and minimal track wear. The five supporting rollers on each side together with the track structure ensure excellent side stability.

EXCEPTIONAL WEIGHT DISTRIBUTION

The large undercarriage and perfect weight distribution ensure impressive stability, which is often greater than conventional machines of the same category. The machine is stable even in particularly critical situations or on muddy ground. The large blade cylinder is well protected against impact and damage.

TRAVELLING AND SWING MOTORS

The travelling swing motors integrate a disc brake that blocks the track on the edge of the excavation or on a slope. The swing motor also has a disc brake and shock-absorbing valves for progressive starting and stopping without any recoil.



65VX: HYDRAULIC LOAD SENSING CONTROL SYSTEM

The hydraulic functions are supplied by a one single pump with axial pistons and variable displacement with Load Sensing control. A priority valve supplies the pilot circuit. The pump delivers only the necessary flow and cuts it down to the minimum when the joysticks are in neutral and cuts off the flow on reaching the maximum pressure.

The system makes for extremely precise manoeuvring, highly sensitive operator control with precise and smooth movements permitting simultaneous movements even when travelling. Thanks to the distribution of the oil flow rates, there is a considerable increase in operating capacity when excavating.



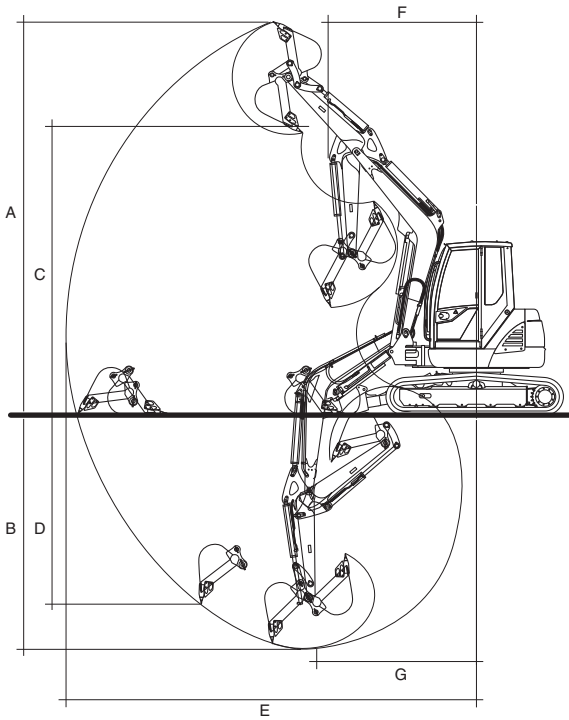
80VX: VARIABLE DELIVERY PUMP

The 80VX uses a hydraulic system with large variable flow pumps that enables performing operations with multiple controls for greater efficiency and speed in carrying out the work.



HIGH CAPACITY TANK

The 65VX tank with a capacity of as much as 85 litres considerably increases the filling interval. This ensures greater operating autonomy.



Working range

	65VX / 65VX*	80VX / 80VX*
A Maximum dumping height	6045 / 6280 mm	6780 / 7010 mm
B Maximum digging depth	3915 / 4215 mm	4200 / 4500 mm
C Maximum digging height	4180 / 4410 mm	4760 / 4990 mm
D Maximum vertical digging depth	2990 / 3355 mm	3300 / 3580 mm
E Maximum digging radius	6490 / 6785 mm	6820 / 7110 mm
F Minimum front turning radius at right boom swing	2560 / 2545 mm	2560 / 2660 mm
G Maximum digging depth radius	2635 / 2635 mm	2710 / 2710 mm

* with long arm

Optional

■ Excavation and earthmoving equipment

- Long arm (+1850 mm)

■ Frame

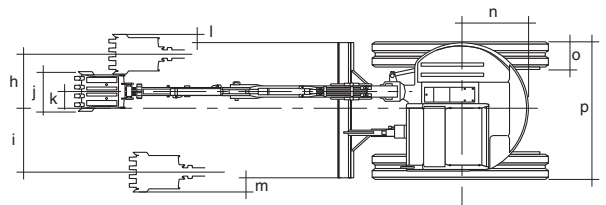
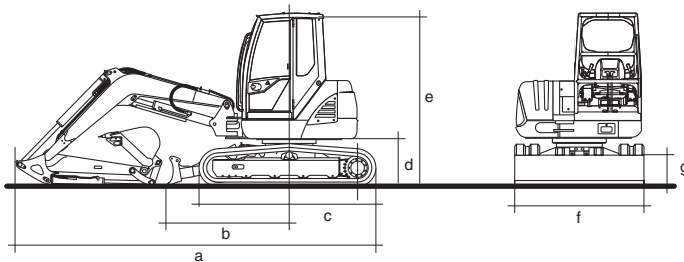
- 65VX: Steel tracks width 400 mm
- 80VX: Steel tracks width 450 mm

■ Lighting

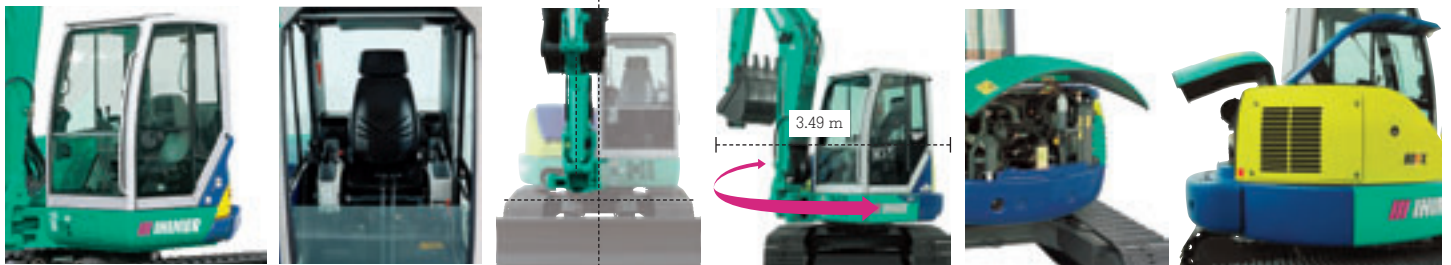
- 2 additional front lights, 1 additional rear light on top of cabin.

■ Comfort and Safety

- Cab Air conditioning
- FOPS falling object protection for cab.



Dimensions (mm)	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
65VX	6220	1825	2795	695	2595	2100	440	640	1230	630	270	200	250	R 1050	400	2100
80VX	5990	1920	2725	680	2580	2200	500	1240	1310	730	230	140	210	R 1100	450	2200



HIGH OPERATOR COMFORT

The spacious cab, TOPS-ROPS-FOPS certified, provides high operator comfort: plenty of space inside, lined metal surfaces, large windows with 360° vision, removable windscreen with opening easily located under the roof, double side window that slides open and an effective heating system. The working position is made even more comfortable thanks to the ergonomic layout of the controls, the adjustable spring seat and excellent soundproofing. The cab can be equipped with an air-conditioning system.

ASYMMETRIC ARM

AND MINIMUM TOTAL TURNING RADIUS

The asymmetrical position of the boom increases the operator vision while digging. The swing bracket overhang and cylinder on the right are excellent for offset digging, with total circular overall dimensions of 3.40 m on the 65VX and 3.49 m on the 80VX.

FULL ACCESSIBILITY

On both models many bonnets provide access to the engine and to the hydraulic pumps, filters and radiator for inspection and maintenance. All the maintenance points are concentrated under the side bonnet such as the level and filling of the hydraulic oil, radiator fluid, fuel and battery check; in the specific case of the 65VX the hydraulic control valve check too. The fuel tank (plastic on the 65VX against rusting and condensation) is comprehensive of a bleed valve and water sedimentation filter.



Photographs appearing in the catalogue were taken for publication and may differ in some cases from actual objects. Specifications are subject to change without notice due to technical improvements or modifications.

<https://truckmanualshub.com/>

65VX

80VX

General Specifications

STD. Bucket capacity (ISO)	0.20 m ³	0.25 m ³
STD. Bucket width	630 mm	730 mm
Machine weight R.S. / S.S.* Cabin	6230 / 6250 kg (with counterweight)	8050 / 8100 kg (with counterweight)
Operating weight R.S. / S.S.* Cabin	6305 / 6325 kg (with counterweight)	8125 / 8175 kg (with counterweight)
Counterweight weight	420 kg	400 kg
Transport dimensions	5870 x 2100 x 2595 mm	6040 x 2200 x 2580 mm
Gradeability	30°	30°
Ground pressure (Cabin)	31 kPa	36 kPa
Minimum ground clearance	340 mm	350 mm
*Rubber Shoe / Steel Shoe		

Engine

Model	Yanmar 4TNV98	Yanmar 4TNV98
N° cylinders / displacement	4 / 3318 cc direct injection	4 / 3318 cc direct injection
Bore x stroke	98 x 110 mm	98 x 110 mm
Max output	43 kW / 2500 min ⁻¹	51 kW / 2500 min ⁻¹
Rated output (ISO 1585)	55.7 HP α 2400 rpm (41 kW / 2400 min ⁻¹)	58.7 HP α 2100 rpm (43.2 kW / 2100 min ⁻¹)
Fuel consumption	238 g / kW-h	241.5 g / kW-h
Engine oil pan capacity	10.5 lt (Max level)	9.6 lt (Max level)

Electrical System

Voltage	12 V	12 V
Battery	12 V - 64 Ah	12 V - 64 Ah
Alternator	12 V - 40 A	12 V - 50 A
Starter motor	12 V - 2.3 kW	12 V - 2.2 kW

Hydraulic system

65VX: the *LOAD SENSING* hydraulic circuit control system, with a variable displacement pump, allow to share out the flow for precise movements and extremely easy operations. 80VX: The *POWER SHIFT* hydraulic circuit control system, with two variable displacement pumps and one gear pump, delivers maximum power, extremely easy handling and precise movements.

The remote control circuit is supplied by another, autonomous gear pump.

Maximum flow	150 lt / min	71.4 lt / min x 2 + 53.1 lt / min
Max Pressure / Setting	24.5 MPa (250 kgf / cm ²)	24.5 MPa (250 kgf/cm ²) x 2 + 21.6 MPa (220 kgf/cm ²)
Control	Hydraulic remote control	Hydraulic remote control

Double action hydraulic circuit for accessories

Maximum flow	90 lt / min	71.4 lt / min
Set pressure	24.5 MPa (250 kgf / cm ²)	24.5 MPa (250 kgf / cm ²)

End-of-stroke cushioning

Boom cylinder	Rod fully extended	Rod fully extended
Arm cylinder	Rod fully retracted	Rod fully retracted and fully extended
Swing cylinder	Rod fully retracted and fully extended	Rod fully retracted and fully extended

Slewing system

The swing system is assured with a hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit joint to a gear swing bearing. Full rotation parking brake is equipped with a swing motor. The brake engages automatically when the safety lever is raised or the engine is turned off.

Swing speed	9.5 min ⁻¹	9.2 min ⁻¹
Turntable braking	Automatic multi-disc brake	Automatic multi-disc brake
Absorption of hydraulic shocks	Shock less valve	Shock less valve

Bucket performance

Max. bucket digging force (ISO 6015)	41.4 kN (4220 kgf)	55 kN (5610 kgf)
Max. arm digging force (ISO 6015)	27.5 kN (2800 kgf)	39 kN (3980 kgf)

Undercarriage

The lower frame is formed with two strong crawler frame joint to a welded and machined middle frame.

Undercarriage length R.S. / S.S.	2795 / 2745 mm	2730 / 2690 mm
Crawler shoe width	400 mm	450 mm
Lower rollers	5 / 1	5 / 1
Track tension	Tension spring and grease cylinder	Tension spring and grease cylinder
Dozer blade size (Width x Height)	2100 mm x 440 mm	2200 mm x 500 mm
Lift above ground	375 mm	435 mm
Drop below ground	435 mm	420 mm

Travel system

Each track is driven by a 2 speed hydraulic axial piston motor coupled to an epicyclic gearing drive reduction unit and automatically parking brake.

Travel speed (1α / 2α)	2.6 / 5.1 km/h	2.6 / 4.3 km/h
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Capacity

Fuel tank	85 lt	85 lt
Hydraulic tank	70 lt	75 lt
Engine oil	110 lt	115 lt
Engine coolant	8.9 lt	10 lt

Boom swing system

Right swing angle	90°	90°
Left swing angle	50°	50°

Other data

Noise level LwA (2000/14/EC)	98 dBA	98 dBA
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distributed by



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